Rainfall - Dry March, How's April? Snowpack Status vs. Runoff Projections Conferences and Events of note

A closed low is working its way toward the central coast today. While it is making fairly good progress, totals have been very modest. Expect highest totals in the half inch to one inch range for the coastal mountains from Monterey Co. to San Diego Co., with lower amounts in typically drier areas. Burn areas are perhaps less at risk due to additional vegetative growth since last fall, and less than intense rainfall rates. Thunderstorms are not as likely as earlier forecast over those regions. Doubt much rain or snow will make it to the Sacramento Valley or Northern Sierra. Look for a dry and warm trend to begin Thursday across most of the state.

The next chance for rain comes late Friday, but only for the very far northernmost locales. This is a Gulf of Alaska low, which is fairly minor. There is good model agreement that this will track into Oregon, trailing only light precip to the CA-OR border, and northwest coast.

Beyond that time frame, there may be quite a 'PIG' forming over the Eastern Pacific. (Pigs being low pressure systems that dominate a weather map). I'd put the chances at pretty small for this to come into fruition. Nonetheless, both the GFS (Global Forecast System) and the ECMWF (European model) are producing a large low pressure center off the coast of Oregon by Tuesday morning. 500mb heights could be as low as

526-528 decameters, which would make for a windy and cold system. Each computer update is different, however, so don't batten down the hatches just yet. Seems storms are having a hard time hanging onto their organization recently.

Last week's snow survey was very interesting. More interesting is the public perception that this winter has put all right in terms of water supply. At the gas station last night, the attendant told me we don't need any more snow or rain because it was such a good season. Oh, contraire! Last year was quite dry, and we are not looking to make up for that deficit. Had March been as productive as January and February, we may have come closer.

Incoming survey results indicate regional Sierra snowpack percentages of normal that range from 94% to 119%. The statewide April 1 average is right at 100% for those courses that are completed. Specifically, Phillips at Highway 50 measured 98% of long-term average, with 27.8" of water content. That was better than last year's 10". But without a wet fall, and a then very dry March, runoff projections are below average.

The soil moisture deficit (dry antecedent condition) means snowmelt will first be absorbed before running off. The DWR estimate for the water year runoff (ending Sept. 30, 2008) is 70% of normal for the statewide average. April-July runoff estimates are higher than the water year estimates, but down from a week ago, now standing at 87%. The Bulletin 120 April 1 water supply report will be available next week. Indications from the California-Nevada River Forecast Center (part of the National Oceanic and Atmospheric Administration) are that runoff may be even lower than the 70% of normal state figure for the

water year. It is a difficult thing to model soil moisture deficits over the mountainous regions of the Sierra. Bottom line, don't assume the near normal April

1 snowpack readings mean our reservoirs will fill back up. That's a simple statement, but important. And if April stays as dry as March, dry conditions could worsen.

For a nice photo of DWR snow master Frank Gehrke and story about this month's readings in light of Delta pumping curtailments, go to: http://www.sacbee.com/101/story/815025.html

This month's video interview can be found here: http://www.water.ca.gov/news/
See 3/26 Snow Survey Video

Water year type projections did climb 2 rating levels for the San Joaquin River System thanks to cold, snowy storms over the southern Sierra in January and February. Here are classifications by year for both the San Joaquin and Sacramento systems:

2007-2008 forecast 2006-2007

2005-2006

Sacramento DRY DRY

WET

San Joaquin BELOW NORMAL CRITICAL

WET

March, 2008 is in the record books as one of the driest. According to the California Climate Tracker (Western Region Climate Center), March, 2008 was the 5th driest March in 114 years for the Golden State, with a statewide average of 0.53". The driest March on record according to the Tracker was 1923 when only 0.25" fell on average.

http://www.wrcc.dri.edu/monitor/cal-mon/index.html

For the 8 Station Index over the Northern Sierra/ Shasta area, it was a tough month. There was only 1.5" of precip recorded, making it the 5th driest on record. Last year (a dry year overall), March had 1.7" of precip. Hard to believe, but this March was actually worse than last March for the precip that enters at the top of the State Water Project. March, 2007 has moved to 7th driest in ranking. Seasonally, the 8 Station is at 79% of average to date, a drop from about 90% of normal one month ago. Sacramento stands at 82% of average.

Sacramento rainfall salvaged itself from being the driest March ever by getting 0.12" over the 2 day period March 28, 29. This puts March at 6th driest. Red Bluff had it's 2nd driest March, with 0.07"; Modesto 4th driest, with 0.01". Bakersfield had only a trace of precip, in comparison to it's normal of 1.41", so March, 2008 ties for 2nd driest. In Fresno at the Yosemite Airport, an over 2" deficit yielded the 5th driest March on record.

One correction to recent news reports about Delta drainage area. It is often quoted as collecting runoff from about 60% of the state. But Chief Hydrologist Maury Roos puts that figure at 37.5%.

A few upcoming meetings of note:

The Water Education Foundation's Executive Briefing will be held this week, April 3 and 4 at the Radisson Hotel in Sacramento. A great line up of speakers is slated for this year's theme "Adapting to the New Realities." For more information please go to: http://www.watereducation.org/08%20EB%20Invite.pdf

The California Energy Commission holds a meeting and webcast on Monday, April 7 from 2:30 - 5:00pm on research findings on climate and energy: http://www.energy.ca.gov/pier/notices/2008-04-07_climate_change_meeting/
2008-04-07_notice.html

This year's Western Snow Conference will be held April 15-17 in Hood River, Oregon:

http://www.westernsnowconference.org/2008.html

The third town hall meeting in conjunction with the "California's Water"

PBS Series will be held in Sacramento at the Crest Theater on Thursday, April 17. Huell Howser will host, with a collection of speakers on key water issues facing the state and Sacramento region. Please see: http://aquanet.water.ca.gov/more/2008/040108acwa.pdf

Look for another newsletter next week, followed by only monthly issuances between May and September.

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